

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled)
2. (Currently Amended) A method for forming a ceramic film comprising the steps of:
  - introducing a reactive gas into a reaction chamber;
  - applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;
  - applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and
  - forming the film on a surface of an object in said reaction chamber,
  - wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave;
  - ~~wherein said reactive gas is introduced into said reaction chamber in a direction toward the surface of the object.~~
3. (Previously Presented) A method according to claim 2 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.
4. (Currently Amended) A method for forming a film comprising the steps of:
  - introducing a reactive gas into a reaction chamber;
  - applying a pulsed microwave to said reactive gas to convert said reactive gas into a plasma;
  - applying a continuous electromagnetic wave to said reactive gas so that said

continuous electromagnetic wave is superposed on said pulsed microwave; and  
forming the film on a surface of an object in the reaction chamber using the  
plasma,  
wherein a power value of said pulsed microwave is higher than a power value  
of said continuous electromagnetic wave;  
~~wherein said reactive gas is introduced into said reaction chamber in a  
direction toward the surface of the object.~~

5. (Previously Presented) A method according to claim 4 further  
comprising a step of applying a magnetic field for performing an electron cyclotron  
resonance in said reaction chamber.

6. (Currently Amended) A method for forming a film comprising the  
steps of:  
introducing a reactive gas into a reaction chamber;  
applying a pulsed electromagnetic wave to said reactive gas to convert said  
reactive gas into a plasma;  
applying a continuous electromagnetic wave to said reactive gas so that said  
continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and  
forming the film on a surface of an object in said reaction chamber,  
~~wherein said reactive gas is introduced into said reaction chamber in a  
direction toward the surface of the object,~~  
wherein a power value of said pulsed electromagnetic wave is higher than a  
power value of said continuous electromagnetic wave, and  
wherein a frequency of said pulsed electromagnetic wave is the same as a  
frequency of said continuous electromagnetic wave.

7. (Previously Presented) A method according to claim 6 further  
comprising a step of applying a magnetic field for performing an electron cyclotron  
resonance in said reaction chamber.

8. (Currently Amended) A method for forming a film comprising the steps of:

- introducing a reactive gas into a reaction chamber;
- applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;
- applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and
- forming the film on a surface of an object in said reaction chamber,

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and

wherein a frequency of said pulsed electromagnetic wave is different from a frequency of said continuous electromagnetic wave, ~~and~~

~~wherein said reactive gas is introduced into said reaction chamber in a direction toward the surface of the object.~~

9. (Previously Presented) A method according to claim 8 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

10. (Currently Amended) A method for forming a metallic film comprising the steps of:

- introducing a reactive gas into a reaction chamber;
- applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;
- applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and
- forming the metallic film on a surface of an object in said reaction chamber,

and

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, ~~and~~

~~wherein said reactive gas is introduced into said reaction chamber in a~~

~~direction toward the surface of the object.~~

11. (Previously Presented) A method according to claim 10 wherein said metallic film comprises a material selected from the group consisting of tungsten, titanium, molybdenum and a silicide thereof.

12. (Previously Presented) A method according to claim 10 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

13. (Currently Amended) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed microwave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed microwave; and

forming the metallic film on a surface of an object in the reaction chamber using the plasma,

wherein a power value of said pulsed microwave is higher than a power value of said continuous electromagnetic wave;

~~wherein said reactive gas is introduced into said reaction chamber in a direction toward the surface of the object.~~

14. (Previously Presented) A method according to claim 13 wherein said metallic film comprises a material selected from the group consisting of tungsten, titanium, molybdenum and a silicide thereof.

15. (Previously Presented) A method according to claim 13 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

16. (Currently Amended) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and

forming the metallic film on a surface of an object in said reaction chamber,

~~wherein said reactive gas is introduced into said reaction chamber in a direction toward the surface of the object,~~

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and

wherein a frequency of said pulsed electromagnetic wave is the same as a frequency of said continuous electromagnetic wave.

17. (Previously Presented) A method according to claim 16 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

18. (Currently Amended) A method for forming a metallic film comprising the steps of:

introducing a reactive gas into a reaction chamber;

applying a pulsed electromagnetic wave to said reactive gas to convert said reactive gas into a plasma;

applying a continuous electromagnetic wave to said reactive gas so that said continuous electromagnetic wave is superposed on said pulsed electromagnetic wave; and

forming the metallic film on a surface of an object in said reaction chamber,

wherein a power value of said pulsed electromagnetic wave is higher than a power value of said continuous electromagnetic wave, and

wherein a frequency of said pulsed electromagnetic wave is different from a

frequency of said continuous electromagnetic wave, ~~and~~  
~~wherein said reactive gas is introduced into said reaction chamber in a~~  
~~direction toward the surface of the object.~~

19. (Previously Presented) A method according to claim 18 wherein said metallic film comprises a material selected from the group consisting of tungsten, titanium, molybdenum and a silicide thereof.

20. (Previously Presented) A method according to claim 18 further comprising a step of applying a magnetic field for performing an electron cyclotron resonance in said reaction chamber.

21. (Previously Presented) A method according to claim 2 wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

22. (Previously Presented) A method according to claim 4 wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

23. (Previously Presented) A method according to claim 6 wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.

24. (Previously Presented) A method according to claim 8 wherein said film comprises a material selected from the group consisting of carbon, diamond like carbon, i-carbon, metal, and insulating ceramics.